

LabPath — District Pilot Brief (Washington, 2026-27)

Prepared 2026-09-14. Every claim below is one the product can back today, with a note on how the district can check it. Where the evidence does not exist yet, this brief says so, because the pilot is how it gets made.

The pitch in one paragraph

LabPath is a browser-based science curriculum for K-12 built on the Next Generation Science Standards — the same standards Washington adopted in 2013 and tests on the WCAS in grades 5, 8 and 11. It gives a teacher 100 interactive Worlds per grade band, each World a set of missions in which a student predicts, tests, explains, revises and transfers, and every mission returns evidence the teacher can read in a minute: what the student believed, what they tried, what changed, and which misconception the class is carrying. It is designed to sit alongside a district's adopted program, not replace it. It has complete coverage of the NGSS performance expectations at the mission level, an evidence pipeline built for teachers and families, and a privacy posture written for Washington districts. What it does not have yet is classroom outcome data. We are asking for a bounded, no-cost pilot with a pre-registered outcome, in exchange for which the district gets the report, the data, and a say in what the product becomes.

Why a district would pilot it — and what backs each reason

Reason	What backs it today	How the district can check
It teaches the standards the WCAS tests.	Every NGSS performance expectation (208 of 208) maps to at least one mission with a written evidence rule; the mapping is generated from the code, not hand-maintained, and carries an "honest headline" with the count.	We hand over the generated standards document. Pick any PE; we open the mission that carries it.
Every mission produces evidence of reasoning, not a score.	Each mission records prediction → test → observation → explanation → revision → transfer, tagged to the PE and to a named misconception. Teachers see misconception clusters per class; families get a passport in plain language; district leaders get a rollout with small-group suppression built in.	Live demo on a teacher account: assign a World, complete it as a student, read the evidence.
It is built for the youngest learners, deliberately.	The K-2 shell has hard floors: 20 px child text, 48 px touch targets, nothing typed, nothing dragged, every prompt spoken on one tap; the K-2 life-science World is bilingual (English/Spanish) and set in Pacific Northwest places and organisms.	Put a kindergartner's tablet in front of us.
A wrong answer is never a dead end.	Missions are built so a wrong prediction produces a named observation and another try; several missions <i>refuse</i> to accept a claim the evidence does not support and tell the student what is missing (one season is not evidence; run the water test first; look at the bench before you believe the numbers).	Try to break it in the demo.
Teacher time is the design constraint.	Target: unaided assignment in under three minutes; evidence auto-collected; 30-minute onboarding; the evidence view leads with the misconception cluster and one suggested teacher move.	We measure this on every pilot teacher and report it.
The engineering is disciplined.	Automated test suite (hundreds of tests) gating every change; grade-band review ledgers naming what is and is not reviewed; a public "honest headline" convention that forbids overclaiming; incidents written up in a privacy log.	We will show the ledgers and the log, including the incident entry.
The privacy paper is already drafted for Washington.	Data privacy agreement exhibits drafted on the national NDPA v2 form used by the Washington Student Privacy Alliance; minimal student data; guardian consent flows; deletion certificates; district-level switches for any affect-related features (off by default in pilots).	Legal review of the DPA before a single roster is loaded.

What we do not have yet — and why that is the pilot

- **Outcome data.** No classroom has used LabPath yet. We will not claim learning gains until a pre-registered study shows them.
- **External review.** Every World is a *review candidate*: engineering-complete, not yet signed off by subject-matter reviewers. The reference Worlds the pilot uses will be reviewed first; the labels in the product say "review candidate" until they are.
- **State-test correlation.** We map to the same performance expectations the WCAS item specifications use, and we can show the mapping. We cannot yet show WCAS scores moving.

We are not asking the district to trust claims. We are asking it to help make the evidence, on terms it sets.

The pilot offer

Scope	One grade band (elementary is the default), three classrooms, the reviewed reference set of Worlds plus any the teachers choose.
Duration	Eight to twelve weeks, starting when the DPA is signed; November 2026 start is the target.
Cost	None. No device requirements beyond a browser; works offline and syncs later.
What we ask	A signed DPA; guardian consent through the built-in flow; 30 minutes of teacher onboarding; one classroom visit per class every two to three weeks for observation (with consent); a 20-minute interview per teacher at the end.
What the district gets	The pilot report — including null findings — written to the pre-registered protocol; all evidence and rollups for its own students; teacher misconception maps for the participating classes; a family passport for every participating family; a seat at the product table for the next year.
Data at the end	Exported to the district on request; deleted on request with a deletion certificate.
Exit	Either party, any time, in writing. Nothing is owed.

The outcome we propose to register

Primary outcome: the proportion of students who, after a wrong first prediction, produce a revised explanation that the evidence rule scores as correct on a **transfer** mission on a **different day**. It is the mechanism the product claims to teach, it is measurable from the pipeline without any test, and a null result would be real information.

Secondary: teacher time-to-assign and evidence-reading accuracy; completion; evidence-chain completeness; defects by World and severity; observation notes by interaction family.

The protocol is registered in writing before day one and does not change afterwards without a logged amendment.

Positioning: what LabPath is next to what a district already has

Washington's own guidance points teachers at formative resources such as OpenSciEd, Ambitious Science Teaching, ClimeTime and STEM Teaching Tools. LabPath is not a competitor to an adopted core program and should not be pitched as one.

- **Next to an adopted core program** (OpenSciEd, Amplify Science, district-built units): LabPath is where the *figuring out* gets recorded. The core program supplies the storyline; LabPath supplies the predict-test-revise loop with evidence a teacher can act on the same day.
- **Next to kit-based programs** (FOSS and similar): the kit is the hands-on experience; LabPath is the model the class can run again, change one variable, and see the consequence, without another box of materials.
- **Next to video and lesson libraries** (Mystery Science, Generation Genius and similar): those explain; LabPath asks the student to commit before it shows anything, and keeps what they committed to.
- **Next to AI tutoring products:** LabPath's missions are deterministic models, not chat. Where an AI tutor exists in the product it is teacher-visible, logged, and switchable off per district, and nothing it says reaches a student as unreviewed instruction.

One sentence for the board: *it is the part of science class where students find out whether they were right, made visible to the teacher.*

Privacy, security, accessibility — what to say when asked

- **Student data:** roster minimum (name, class, grade); evidence records are about reasoning on missions, not behaviour or biometrics. Affect-sensing features exist in the codebase and are off in pilots unless the DPA covers them explicitly.
 - **Agreement:** NDPA v2 exhibits drafted; FERPA and COPPA obligations mapped; Washington's student privacy statute reviewed as part of the DPA.
 - **Deletion:** per-student and per-district deletion with a certificate.
 - **Incidents:** kept in a written privacy log the district may read. The log has one entry from September 2026, before any school used the product, with the fix and the timeline. We would rather show it than be asked.
 - **Security:** row-level access control in the database; signed evidence records; offline data encrypted on device; a third-party penetration test is scheduled before general release.
 - **Accessibility:** keyboard-only paths and screen-reader labels in the K-2 and 3-5 experiences; contrast and target-size floors enforced by the authoring gate; a WCAG 2.1 AA conformance statement is being prepared and will be provided before general release. Districts requiring a VPAT at pilot stage should say so; we will prioritise it.
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Objections you will hear, and honest answers

"Is this AI?" The missions are deterministic models: the same action gives the same result every time, and a teacher can reproduce anything a student saw. Where AI appears, it is teacher-visible and switchable off.

"Screen time in kindergarten." The K-2 shell is a five-minute tool for a hands-on lesson: every World ends with a "gather" list of real materials, and the teacher note says what to do at the table. It is not designed for a child alone with a tablet.

"We just adopted a program." Keep it. LabPath is where the predictions and revisions from that program's investigations get recorded and read.

"Will it help our WCAS scores?" We map to the same performance expectations; we cannot yet show scores moving, and we will not say we can. The pilot's outcome is about reasoning transfer, which is what the WCAS item specifications describe.

"Who reviewed the content?" Nobody outside the company yet. That is why the pilot uses the reference Worlds first, why every World is labelled "review candidate" until a named reviewer signs it, and why the district's own teachers' findings go into the ledger.

"What about our students with IEPs, or English learners?" No typing, no dragging, spoken prompts, bilingual copy in the K-2 life-science World, keyboard and screen-reader paths. We will ask the school to include those students in observation, with consent, because that is where the design gets tested.

"What if it doesn't work?" Then the district has a written report saying so, its own data, and no bill. That outcome is in the protocol.

"Who are you?" A small Washington company; the founder builds the product with in-house engineers; the review pool and pilot manager are being contracted now. We are early. That is why the terms above are the terms.

A 20-minute demo, in order

1. The generated standards document: pick the grade the district cares about, pick a PE, open the mission. (3 min)
2. A K-2 World on a tablet, spoken prompt on, as a five-year-old would meet it: "Who lives where." (4 min)
3. A 3-5 mission that refuses a claim — "Mix and check" or "Where are the mountains?" — and shows the student what is missing. (4 min)
4. The teacher view for that class: the misconception cluster and the suggested move. (4 min)
5. The family passport and the district rollout, with suppression. (3 min)
6. The ledger page for the World just shown, with its "review candidate" status, and the privacy log. (2 min)

Leave the standards document and the DPA draft behind.

Cover note (email or letter to the curriculum director)

Subject: A no-cost science pilot with a written protocol — three classrooms, eight weeks

Dear _____,

We build LabPath, a browser-based science curriculum on the Next Generation Science Standards that Washington tests on the WCAS. Every performance expectation maps to an interactive mission that records what a student predicted, tried, revised and transferred, and gives the teacher the class's misconceptions the same day. It sits alongside an adopted program; it does not replace one.

We have not run it in a classroom yet, and we will not claim results we do not have. We are asking _____ School District for a bounded pilot: one grade band, three classrooms, eight to twelve weeks, no cost, with a pre-registered outcome and a written report the district keeps, including a null result if that is what we find. The data privacy agreement is drafted on the NDPA form your alliance uses, and it is signed before any roster is loaded.

Twenty minutes with a tablet is enough to see whether this is worth a conversation. I can come to you.

Quantum Learning Machines

Provenance for the figures in this brief: standards coverage from the generated `docs/ngss-mapping.md` in the product repository (208 of 208 performance expectations at mission level as of the September 2026 merges; every World a review candidate, none externally reviewed); WCAS and standards facts from OSPI; pilot terms from `docs/LABPATH_PILOT_PROTOCOL_TEMPLATE.md`; privacy items from the DPA exhibits and `docs/PRIVACY_LOG.md`.